

CHLORINE

Element Symbol: Cl Atomic Number: 17

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Chlorine is used extensively in the disinfection of water from the backyard swimming pool to public water supplies and wastewater effluents. Chlorine is cheap and effective providing enormous community benefit by enabling the supply of safe drinking water.

However, it has a darker history such as its use in chemical warfare during WWI. Chloride salts are also very important in biological systems being involved in digestion and function of the nervous system even though we are often warned to reduce our intake of one of the most common source of chloride, common table salt (NaCl).

As we strive for reliable water sources to supply the population, desalination, or the removal of salt, from seawater is seen as the saviour.

Provided by the element sponsor Jason Smith

ARTISTS DESCRIPTION

The yellow/green background represents the colour of chlorine gas. I have included a cartoon representation of a chloride channel.

The channel is found in the membrane of all living cells and helps maintain membrane potential, essential for normal function.

There is also a diagram of a neuron, an excitable cell, where chloride channels are particularly important in restoring membrane potential after activity.

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